

**REGULATION 8  
ORGANIC COMPOUNDS  
RULE 47  
AIR STRIPPING AND SOIL VAPOR EXTRACTION OPERATIONS**

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**REGULATION 8  
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RULE 47  
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(Adopted December 20, 1989)

**8-47-100 GENERAL**

**8-47-101 Description:** The purpose of this Rule is to limit emissions of organic compounds from contaminated groundwater and soil. The provisions of this Rule shall apply to new and modified air stripping and soil vapor extraction equipment used for the treatment of groundwater or soil contaminated with organic compounds.

**8-47-109 Exemption, Small Operations:** The provisions of Section 8-47-301 shall not apply to operations that satisfy both of the following requirements:

109.1 Operations that emit no more than one of the following compounds: benzene, vinyl chloride, trichloroethylene, perchloroethylene or methylene chloride; and

109.2 Benzene emissions do not exceed 0.05 pounds per day, vinyl chloride emissions do not exceed 0.2 pounds per day or trichloroethylene, perchloroethylene or methylene chloride emissions do not exceed 0.5 pounds per day.

**8-47-110 Exemption, Sewage Treatment Facilities:** The requirements of this Rule shall not apply to aeration of wastewater at sewage treatment facilities.

**8-47-111 Exemption, Industrial Wastewater Treatment Facilities:** The requirements of this Rule shall not apply to industrial wastewater treatment facilities.

**8-47-112 Exemption, Specified Operation:** This Rule shall not apply to operations that are subject to the requirements of Regulation 8, Rule 40.

**8-47-113 Exemption, Air Stripping and Soil Vapor Extraction Operations Less Than 1 Pound per Day:** The provisions of Section 8-47-301 shall not apply to operations with total emissions of less than 1 pound per day of benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene, provided the requirements of Section 8-47-402 are satisfied. Once an exemption pursuant to this section is granted, if the emissions of an operation exceed 1 pound per day, then that operation is subject to Section 8-47-301. The operator of the source may submit a petition to the APCO in writing requesting review under this exemption if uncontrolled emissions have been shown, due to sustained remediation activities, to have dropped to a constant emission rate of less than 1 pound per day.

**8-47-200 DEFINITIONS**

**8-47-201 Air Stripping:** Equipment which is used to transfer organic compounds from contaminated water to the atmosphere by bringing water into intimate contact with air.

**8-47-202 Soil Vapor Extraction:** An underground and/or aboveground active system installed to extract organic compounds from the soil and vent them to the atmosphere. Operations subject to Regulation 8, Rule 40, are not subject to this Rule.

**8-47-203 Active System:** A system which forcibly aerates soil by mechanically drawing air through the soil or applying heat to the soil.

**8-47-204 Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

**8-47-300 STANDARDS**

**8-47-301 Emission Control Requirement, Specific Compounds:** Any air stripping and soil vapor extraction operations which emit benzene, vinyl chloride, perchloroethylene,

methylene chloride and/or trichloroethylene shall be vented to a control device which reduces emissions to the atmosphere by at least 90 percent by weight.

**8-47-302 Organic Compounds:** Any air stripping and soil vapor extraction operations with a total organic compound emission greater than 15 pounds per day shall be vented to a control device which reduces the total organic compound emissions to the atmosphere by at least 90 percent by weight.

#### **8-47-400 ADMINISTRATIVE REQUIREMENTS**

**8-47-401 Reporting, Superfund Amendments and Reauthorization Act (SARA) Sites:** Any person responsible for air stripping or soil vapor extraction operations which have not applied for a District permit shall provide written notification to the APCO of intention to operate. This notice shall include:

- 401.1 Address of the remediation site.
- 401.2 Schedule of starting date 30 days prior to start-up.
- 401.3 Written certification that the proposed operation will be in compliance with the requirements of this Rule.
- 401.4 Any person seeking to satisfy the conditions of Section 8-47-113 shall submit the health risk screening analysis for APCO approval as required in Section 8-47-402.

*(Amended June 15, 2005)*

**8-47-402 Less Than 1 Pound Per Day Petition:** Any person seeking to satisfy the conditions of Section 8-47-113 shall:

- 402.1 Submit a petition to the APCO in writing requesting review and written approval of a health risk screening analysis for the benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene organic compound emissions that are less than 1 pound per day.

*(Amended June 15, 2005)*

#### **8-47-500 MONITORING AND RECORDS**

**8-47-501 Records:** Any person subject to the requirement of this Rule shall keep records of the following:

- 501.1 Any water analysis results as required by Section 8-47-601.
- 501.2 Any vapor monitoring results that have been collected to monitor the performance of a control device. Such records shall be retained for a minimum of two years from date of entry and be made available to District staff upon request.

#### **8-47-600 MANUAL OF PROCEDURES**

**8-47-601 Air Stripper Water Sampling:** For each of the first three days of operation at least one sample of influent water into the air stripper shall be collected and analyzed. At least one sample shall be collected and analyzed thereafter for each calendar month of operation. Samples shall be collected in accordance with the EPA's or the Regional Water Quality Control Board's Analytical Methods.

*(Amended October 6, 1993)*

**8-47-602 Measurement of Organic Content:** Organic compound concentration in the water shall be determined by the Regional Water Quality Control Board's Analytical Methods.

*(Amended October 6, 1993)*

**8-47-603 Determination of Emissions:** Emissions of organic compounds, as specified in sections 8-47-301 and 8-47-302, shall be measured as prescribed by any of the following methods 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25 or 25A. A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.

*(Adopted 12/20/89; Amended 6/15/94)*